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| APPLICATION NO.                                                                                         | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.               | CONFIRMATION NO.       |
|---------------------------------------------------------------------------------------------------------|-------------|----------------------|-----------------------------------|------------------------|
| 10/525,022                                                                                              | 10/06/2005  | Takahiro Eguchi      | 024918-0121                       | 3140                   |
| 22428 7590 01/10/2008<br>FOLEY AND LARDNER LLP<br>SUITE 500<br>3000 K STREET NW<br>WASHINGTON, DC 20007 |             |                      | EXAMINER<br>SRIVASTAVA, KAILASH C |                        |
|                                                                                                         |             |                      | ART UNIT<br>1657                  | PAPER NUMBER           |
|                                                                                                         |             |                      | MAIL DATE<br>01/10/2008           | DELIVERY MODE<br>PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|                              |                           |  |                     |  |
|------------------------------|---------------------------|--|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b>    |  | <b>Applicant(s)</b> |  |
|                              | 10/525,022                |  | EGUCHI ET AL.       |  |
|                              | <b>Examiner</b>           |  | <b>Art Unit</b>     |  |
|                              | Dr. Kailash C. Srivastava |  | 1657                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 October 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/ are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                        |                                                                   |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/20/2006</u> .                                              | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

1. The Preliminary Amendment filed under 37 C.F.R. §1.115 on 18 February 2005 is acknowledged and entered.

### **Informal Matters**

2. Please note the instant Non-Provisional application under prosecution at the United States Patent and Trademark Office (i.e., USPTO) has been assigned the number 10/525,022. To aid in correlating any papers for this application, please ensure that this application number (i.e., 10/525,022) is recited in all further correspondence regarding this application.
3. Please also note that the instant application has been assigned to Art Unit 1657 at the USPTO. To aid in correlating any papers for this application (i.e., 10/525,022), all further correspondence regarding this application should be directed to Art Unit 1657.
4. The assigned Examiner to the instant application in the USPTO is Dr. Kailash C. Srivastava. To aid in correlating any papers for this application (i.e., 10/525,022), all further correspondence regarding this application should be directed to Examiner K.C. Srivastava in Art Unit 1657.

### **Claims Status**

5. Claims 3-5 and 7 have currently been amended.
6. Claims 1-7 are pending and are examined on merits.
7. Please note, the status for Claims 1-2 and 6 is not in accordance with 37 CFR §1.121 (See M.P.E.P. §714 [R-5] (c).

Appropriate correction is required. However, in the interest of expediting the prosecution of this application, Claims 1-7 are examined on merits.

### **Priority**

8. Applicants' claim for priority under 35 U.S.C. §119 (a-d) to PCT/JP03/10595 filed 21 August 2003 is acknowledged.

### Information Disclosure Statement

9. The Information Disclosure Statement (i.e., IDS) filed on 18 February 2005 has been made of record and placed in the IFW file, because text of the Abstracts listed on 1449 accompanying said IDS have not been enclosed. Please submit the copies of abstracts along with a new 1449.
10. The Information Disclosure Statement (i.e., IDS) filed 20 November 2006 have been made of record, considered and a duly initialed copy is enclosed with this Office Action.

### Claim Rejections - 35 U.S.C. §112

11. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

*The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.*

12. Claims 1-6 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- ❖ Claims 1-2 as presently recited seem to be difficult to practice because one of skill in absence of SE-2000 of Nippon Denshoku (illumination C, field of view 2 degrees as listed in Claim 1 and "Senesi-POP" film will not be able to practice the invention as claimed.
- ❖ In claim 5 the limitation, "A method for producing the decolorized yeast cell wall fraction according to Claim 1" lacks sufficient antecedent basis because Claim 1 is not drawn to a method. It is drawn to a composition. Appropriate correction is required.

All other claims depend directly or indirectly from the rejected claim 1, 1 and are, therefore, also rejected under 35 U.S.C. §112, second paragraph, for the reasons set forth above.

### Claim Rejections - 35 U.S.C. §103

13. The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

14. Claims 1-7 are rejected under 35 U.S.C. §103(a) as obvious over the combined teachings from Kasai et al. (US Patent 7238,355 B1) in view of Sapparo Breweries Ltd (JP \$-248968 A) and further in

view of Greenshields (WO 92/07064).

Claims recite a composition comprising decolorized yeast cell wall, wherein said composition is a coating material and is prepared by releasing the internal contents of yeast cell by enzymatic treatment, followed by separation, acid treatment of the remaining material and subsequently bleaching the remaining cell wall with ozone and hydrogen peroxide to lower the yellow index of the liquid.

Kasai et al. teach a method and a composition to prepare the yeast cell wall and coating material comprising said prepared yeast cell wall fractions by enzymatically treating the yeasts, followed by separation step (Claims 1 and 1-12) followed by treatment with aqueous acidic solution and subsequent separation of the treated material (Claim 8) to remove the soluble constituents. Kasai et al. do not teach bleaching or decolorizing the yeast cell wall material. However, it was well known at the time of Kasai et al.'s invention filing and at the time of instant application filing that enzyme and acid treated yeast has a peculiar smell and color that needs to be removed.

Sapparo Breweries teachings are to prepare yeast cell walls by removing the internal contents of yeasts by enzymatic treatment followed by separation and subsequent acid treatment. The material obtained after the acid treatment is bleached. / treated with ozone.

Greenshields teach preparation of yeast cell wall by enzymatic, acid, alkaline treatment of the yeast cells and residue left from enzymatic treatment, followed by treating the residue with hydrogen peroxide to decolorize (Abstract, Page 3, Lines 23-24).

One having ordinary skill in the art at the time of the claimed invention would have been motivated to modify/combine the teachings from Kasai et al., with those from Sapparo Breweries and Greenshields to obtain a method to make and a coating material composition comprising decolorized yeast cell wall; because Sapparo breweries teach bleaching the prepared yeast cell walls with ozone and Greenshields teach to bleach the prepared yeast with hydrogen peroxide. Please note that upon treating the prepared yeast cell wall with each of ozone and hydrogen peroxide, or treatment of yeast cell wall with hydrogen peroxide and ozone in two separate steps, the yellow index of the resulting liquid will inherently be at the level instantly claimed...

Thus, it would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to modify teachings from Kasai et al., with those from Sapparo Breweries and Greenshields. to obtain a coating material composition comprising decolorized yeast cell cells having

reduced yellow index in the liquid and a method to prepare said composition by enzymatic treatment of yeast cells followed by separation and treatment of resulting residue with acidic solution followed by separation and bleaching with ozone/hydrogen peroxide; because Sapparo Brewery remedy the deficiency of ozone treatment and Greenshields teach hydrogen peroxide treatment of yeast cell that Kasai et al's teaching are deficient of.

From the teachings of the references cited *supra*, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.


### Conclusion

15. No Claims are allowed.


16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Kailash C. Srivastava whose telephone number is (571) 272-0923. The examiner can normally be reached on Monday to Thursday from 7:30 A.M. to 6:00 P.M. (Eastern Standard or Daylight Savings Time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Jon Weber can be reached at (571)-272-0925 Monday through Thursday 7:30 A.M. to 6:00 P.M. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding may be obtained from the Patent Application Information Retrieval (i.e., PAIR) system. Status information for the published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (i.e., EBC) at: (866)-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
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07 January 2008

  
DAVID M. NAFF  
PRIMARY EXAMINER  
ART UNIT 1281657